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09/891,740

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Martin Alter

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EXAMINER

LE, THONG QUOC

ART UNIT

PAPER NUMBER

2818

DATE MAILED: 12/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/891,740

Applicant(s)

ALTER, MARTIN

Examiner

Thong Q. Le

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-30 and 33-45 is/are rejected.
- 7) ☒ Claim(s) 5, 31 and 32 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-45 are presented for examination.

Information Disclosure Statement

2. This office acknowledges receipt of the following items from the Applicant:
Information Disclosure Statement (IDS) filed on June 25, 2001.
3. Information disclosed and list on PTO 1449 was considered.

Specification

4. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification and the claims.

Claim Objections

5. Claims 1-33 are objected to because of the following informalities:
Regarding claim 1, line 2, should be change "substrate," to -substrate; and--.
Regarding claims 2-33, line 1, should be changed "The device" to -The optical device" as defined in claim 1.
6. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-4, 12-16, 40-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claims 1-4, 12-16 recites the limitation "said **elements**" in line 3 of claim 1 and in dependent claims. There is insufficient antecedent basis for this limitation in the claims.

In claim 1, line 2, applicant discloses "**programmable elements**". Therefore, in line 3 of claim 1 and dependent claims must use the same name as defined in line 2 of independent claim 1.

10. Claim 3 recites the limitation "said **contacts**". There is insufficient antecedent basis for this limitation in the claim. Should be change to —the conductive contacts—as defined in line 1.

11. Claims 40-45 recites the limitation "said **elements**". There is insufficient antecedent basis for this limitation in the claim.

In independent claims 34, applicant discloses "**an array of elements**". Therefore, dependent claims must use the same name as defined in independent claim 1.

Claims should be cancel or amend for more clearly.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

13. Claims 1-4, 6-12, 17-22, 26-30, 34-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Hansen et al. (U.S. Patent No. 6,208,463).

Regarding claims 1, 34 Hansen et al. disclose an optical device (Figure 2) comprising:

programmable elements (Figure 2, 12) formed on a surface of a substrate (Figure 2, 18, ABSTRACT, Column 12, lines 27-31, Column 12, lines 56-67); and
the elements being selectively programmed to create a reflective filament pattern (Column 10, lines 51-66), the surface of the substrate for reflecting radiation in a selected optical pattern (Column 10, lines 7-26, Column 12, lines 56-64).

Regarding claims 2-4, 6-12, 17-22, 26-30, 34-39, Hansen et al. disclose the elements are formed in two dimensional array (Figure 2) as claim 2 discloses, and the elements has conductive contacts, and the contacts are selected from metals consisting of aluminum and aluminum alloy (Column 14, lines 42-46) as claim 3 discloses, and elements are selectively programmed to create a reflective filament pattern to convey information (Column 10, lines 59-67) as claims 4, 30 disclose, and optical fibers receiving reflected light from filaments of programmed elements (Column 18, lines 28) as claims 6, 29 disclose, and the optical fibers are located proximate to the surface of the substrate (Column 18, lines 18-40) as claim 7 discloses, and having a light source

(Column 10, lines 7-12) as claim 8 discloses, a second substrate having a photosensitive material (Column 3, lines 1-4) as claims 9, 17-19, 22, 38 disclose, and comprising an optical elements positioned with respect to the surface for focusing light on filaments of programmed elements (Column 24, lines 3-5) as claims 10-12, 30 disclose, and the selected optical pattern is an optical image, optical code (Column 10, lines 51-65) as claims 20-21, 35-37 disclose, and the substrate is semiconductor substrate (Column 14, lines 55-65) as claims 27-29 disclose, and detecting a pattern of radiation that has passed through the substrate, the filaments at least partially blocking the radiation from passing through the substrate (Column 12, lines 28-31) as claim 39 discloses.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 13-16, 23-25, 33 and 40-45 rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. (U.S. Patent No. 6,208,463).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use elements comprise less than 100 elements, or more than 100 elements, or more than 1,000 elements, or more than 1,000,000 elements, and elements are diodes, or zener diodes, or transistors, or normally-shortening conductive, or

fuses, or anti-fuses. Applicant has not disclosed that the number of elements and type of elements above provide an advantage, is use to a particular purpose, or solve a state problem. A change in using of number of elements and of type of elements is generally recognized as being within the level of ordinary skill in the art.

Therefore, it would have been obvious to a person of ordinary skill in this art to used the number and type of elements teaching in Hansen et al. in (Column 1, lines 7-20, Column 12, lines 49-67, Column 14, lines 42-46) to obtain the invention as a specified in claims 13-16, 33 and 40-45.

Allowable Subject Matter

16. Claims 5, 31-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5, 31-32 include allowable subject matter since the prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Hansen et al. (U.S. Patent No. 6,208,463), and others, does not teach the claimed invention having an address decoder or read circuit Figure 4, 36 on the substrate for selectively addressing the elements for programming.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Le whose telephone number is 703-306-9123. The examiner can normally be reached on 8:00am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on 703-308-4910. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-3329.



Thong Q. Le
Examiner
Art Unit 2818

December 16, 2002